



Junior Ranger

Ages 7-12



Welcome to Carlsbad Caverns National Park!

Become a junior ranger by completing **7 of the first 15** activities listed below and What I Can Do! (page 14). Check the box next to each activity you complete. When you are finished, take it to the information desk to receive a junior ranger badge.

This book belongs to: _____



Activity

- 1. Respect and Protect (page 2)
- 2. Cavern Scavenger Hunt (page 3)
- 3. Mapping a Cavern (page 4)
- 4. The Carlsbad Cavern Story (page 5)
- 5. Ask a Ranger (page 6)
- 6. Go Take a Hike (page 7)
- 7. Geology Rocks! (page 8)
- 8. What's the Word? (pages 9–10)
- 9. Cavern Word Search (page 11)
- 10. Winged Wonders (page 12)
- 11. Carlsbad Caverns Diamante (page 13)
- 12. Hike the Natural Entrance Trail
- 13. Walk Through the Big Room
- 14. Attend a Ranger-Guided Tour or Program
- 15. Watch the Park Movie
- 16. What I Can Do! (page 14)

Respect and Protect

It is important that we all do our part to protect the cavern and ourselves. In the drawing below, circle what is wrong to identify how to correctly protect the cavern. Then answer the questions at the bottom.



NPS / DUSTIN BAKER ILLUSTRATION

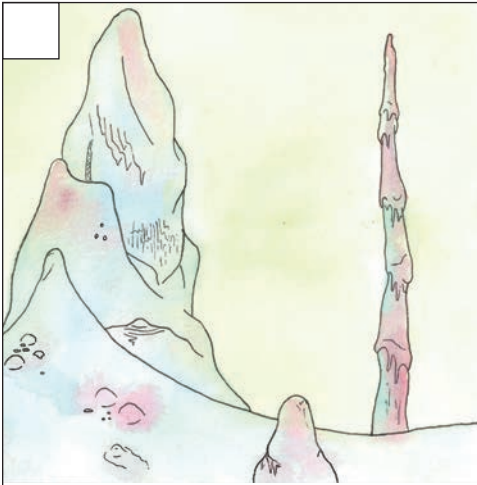
1. Imagine you saw someone breaking a cavern rule. What would you do?

2. Carlsbad Caverns National Park has about 500,000 visitors every year. If every visitor took a formation, what would the cavern look like in the future?

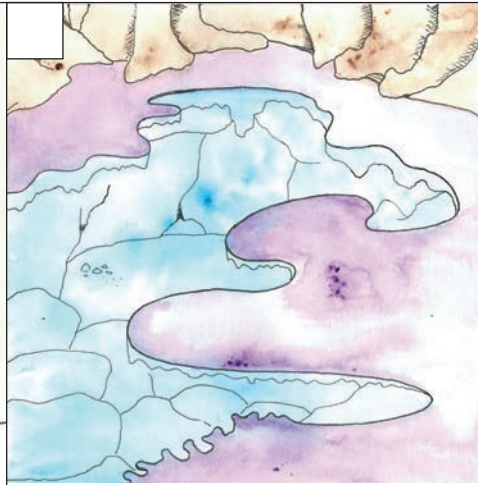
3. Why is it important to follow the rules in the cavern?

Cavern Scavenger Hunt

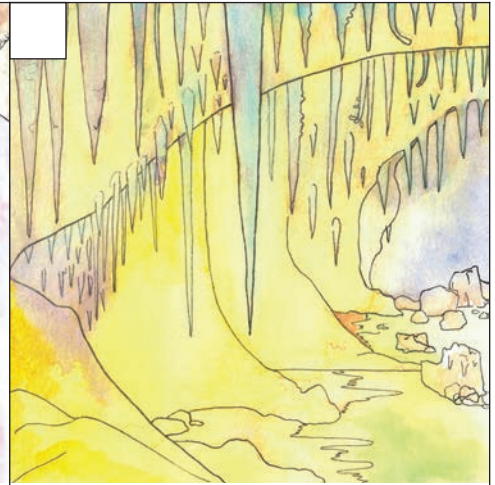
Mark the box for the cave formations or historic artifacts you see as you visit the cavern. How many can you find?



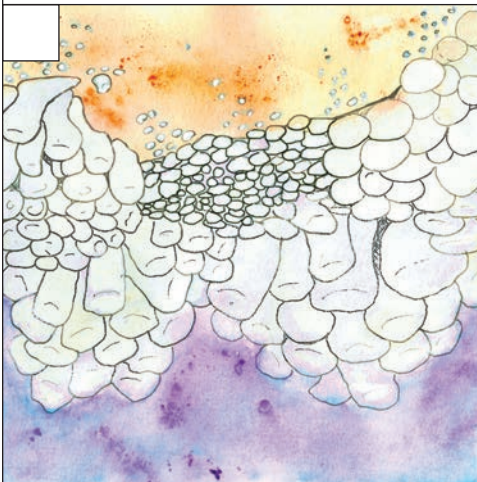
Stalagmites: Formations growing up from the ground



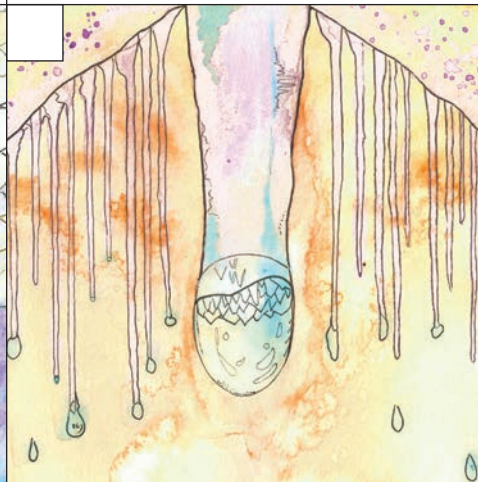
Cave Pools: Places where water dripping from above collects in the cavern



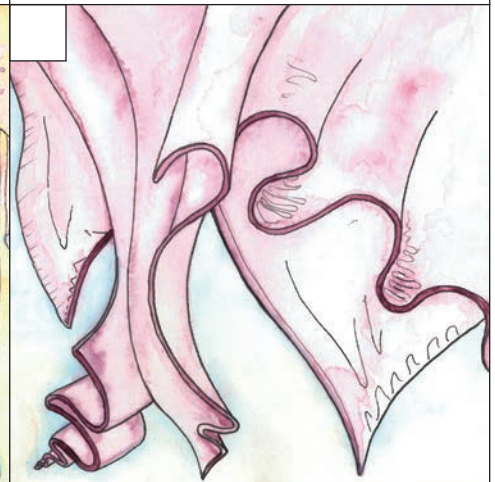
Stalactites: Formations that hang down from the ceiling



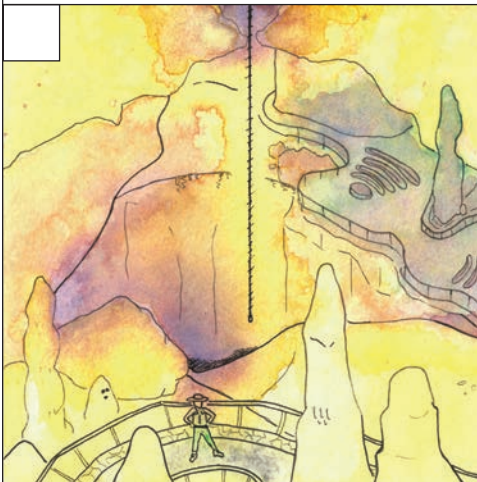
Cave Popcorn: Circular and bumpy formations found throughout the cavern



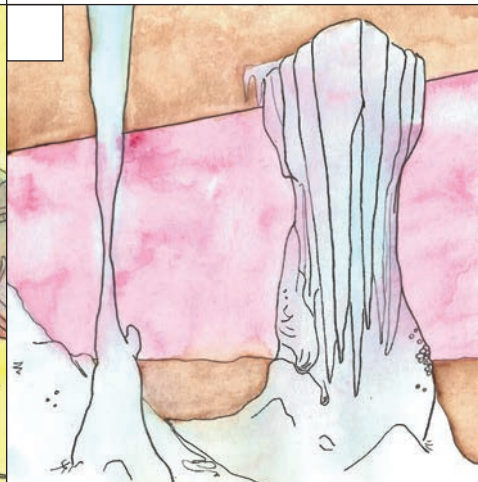
Soda Straws: Delicate and hollow formations about the width of a water droplet



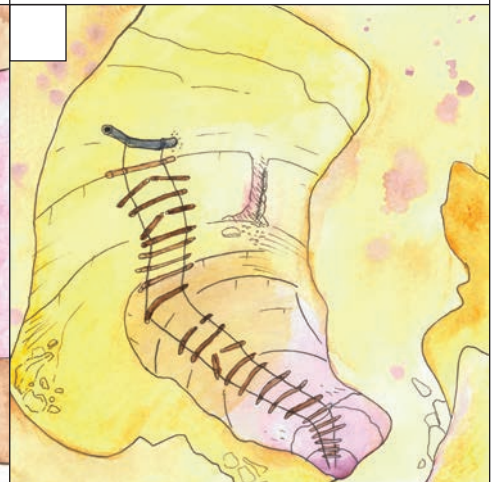
Draperies: Sheet-like formations that grow on steep slopes on the ceiling



Spirit World Rope: A 255-foot (75 meter) rope first climbed in 1985 to explore the cavern



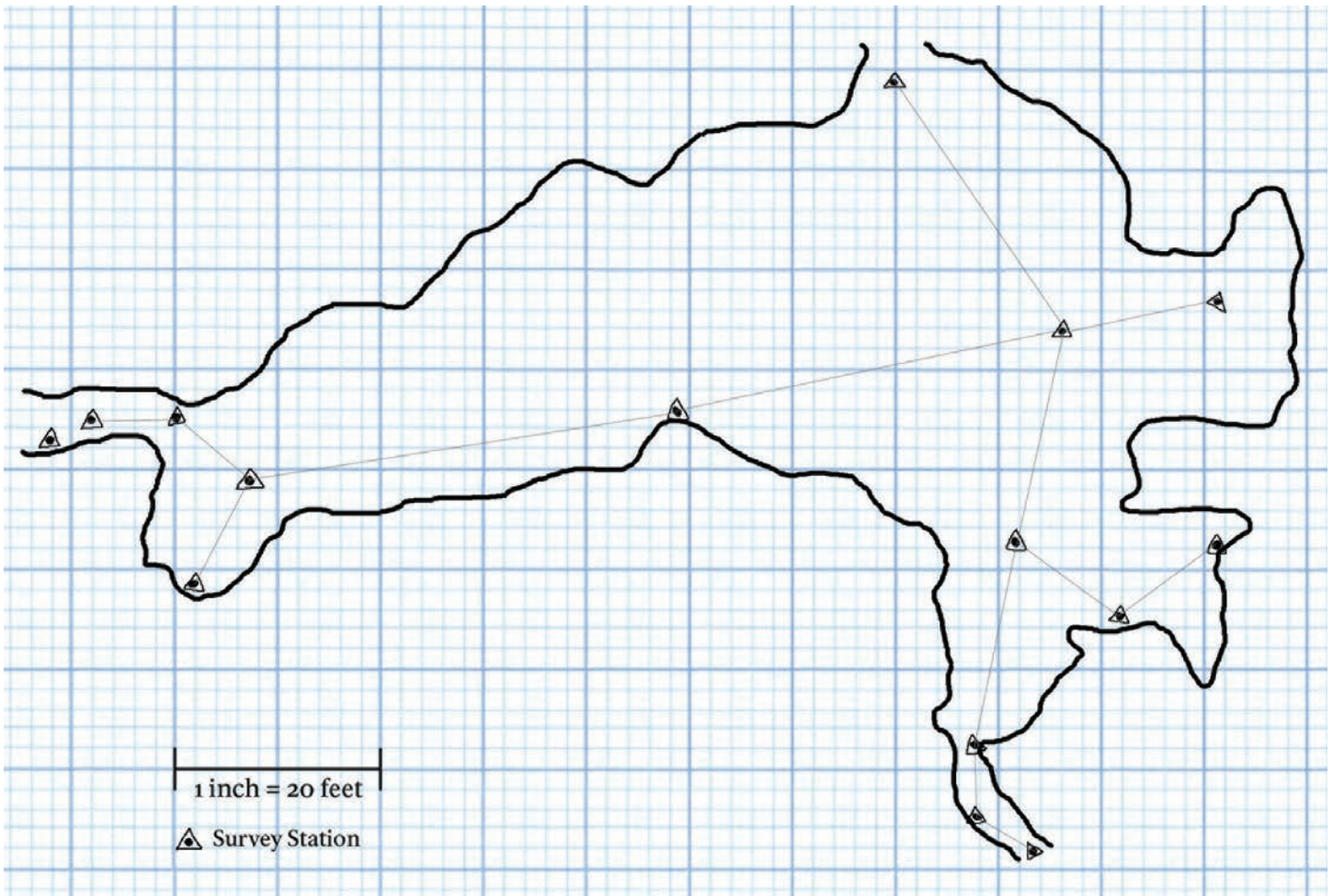
Columns: Formations that go from the ceiling to the floor



Historic Ladder: Used by National Geographic explorers in 1924

Mapping a Cavern

Cave surveying is an important task to help map and understand a cave. A team consists of three to four members, and one person is always in charge of sketching new passages. Imagine you are now a surveyer, in charge of drawing a newly discovered room in Carlsbad Cavern. Use the key below to add features to the room. Be sure to give your discovery a name!



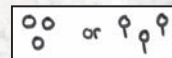
Room name: _____



Stalactites



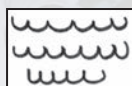
Columns



Popcorn



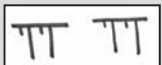
Stalagmites



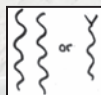
Flowstone



Pit



Soda Straws



Drapery



Slope

The Carlsbad Cavern Story

Use the key below to fill in the blanks and piece together the human history of Carlsbad Cavern.



Humans have known about Carlsbad _____ for thousands of years. American Indians, like the Mescalero _____ tribe, lived near the Natural Entrance, long before the early settlers knew the cavern existed. Around 1898, a _____ named Jim White followed what he thought was smoke on the horizon. But when he came closer, he realized it was hundreds of thousands of _____ free-tailed bats “boiling” out of a large cave. Jim made a _____ out of fence wire and sticks to investigate the darkness. He became the first important _____ by using an old coffee pot as a

_____ . Jim told _____ he met about the marvels he saw. His wild underground tale attracted just a few _____ adventurers, but others were more interested in the bats. Miners like Abijah Long found value in _____ deposits, and started removing it in 1903. Some of the guano was 40 feet (12 meters) deep! It was processed and shipped to California as _____ for the citrus groves. Soon, the unique geology and history became far more



_____ in saving this special place. Carlsbad Cavern became a national _____ in 1923, then a national _____ in 1930 to preserve the land and caves within. The cultural and natural

importance of the park led to its designation as a World _____ Site in 1995. Now, people from all over the world come to be inspired by this cavern’s beauty. How will you help protect this park for _____ generations?



Key:	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>I</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
	1	2	3	4	5	6	7	8	9	10	11	12	13
	<u>N</u>	<u>O</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
	14	15	16	17	18	19	20	21	22	23	24	25	26

Ask a Ranger

Find a park ranger or volunteer and ask the questions below.

1. What is your name?

2. What is your job in the park?

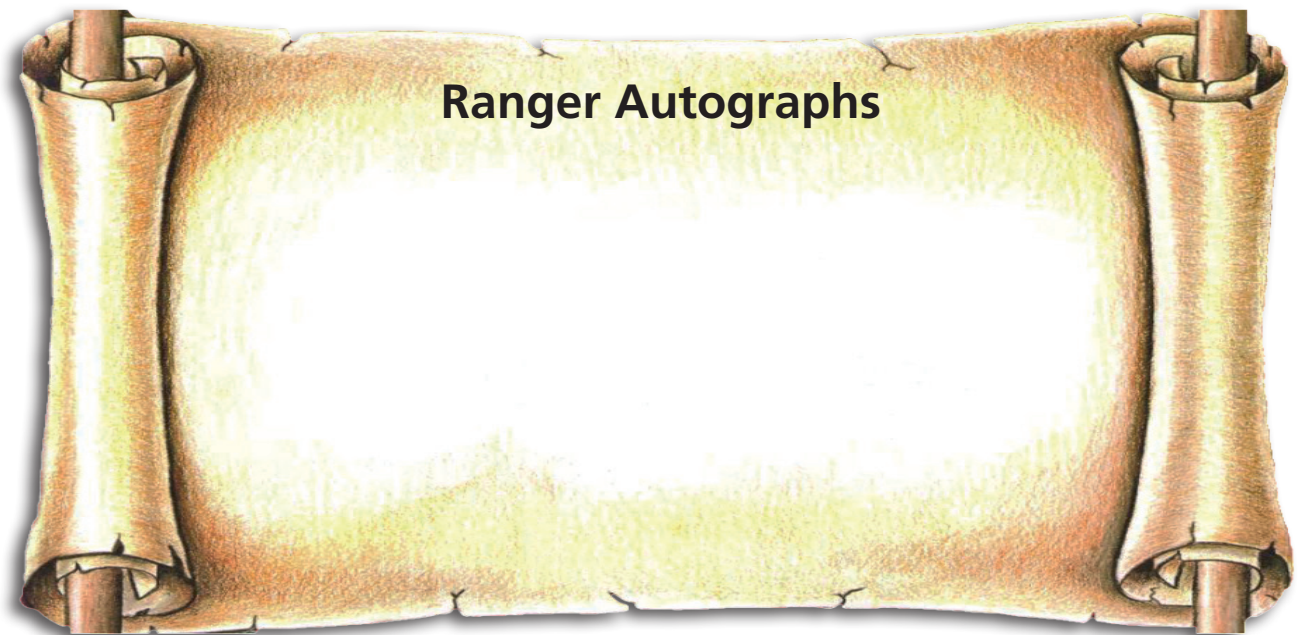
3. What is a park close to where you grew up?

4. What was the first national park you ever visited?

5. Why do you think Carlsbad Caverns National Park is important?

6. What is Carlsbad Cavern's most famous animal and what does it eat?

7. Who owns the national parks?



Go Take a Hike

Walk the 1/2 mile (0.8 km) Nature Trail at the east end of the parking lot. Ask a park ranger for directions.

As you walk, look at the diversity of plants that are native to the Chihuahuan Desert. Use the signs along the trail and identify the plants below, using the word bank at the bottom of the page to help you. Write at least one thing you observed or learned about each plant.

















Word Bank

Cholla
Ocotillo

Desert Willow
Prickly Pear

Juniper
Sotol

Lechuguilla
Yucca

Geology Rocks!

Read the geologic story of the cavern and complete the activity below.

There are beautiful rock decorations in the cavern. These formations are made by drops of water that have slowly trickled through the ground. As it travels underground, the water picks up calcite (as well as other minerals) along the way. When the water drips in the cavern, it evaporates and leaves calcite behind. Calcite formations grow very slowly and are very fragile. It takes years for them to grow, but only one careless moment to destroy them.

Help Roslin the Raindrop travel to the Big Room by finding the path through the maze.



What's the Word?

Use the clues and word bank below to complete the crossword on the following page.

ACROSS

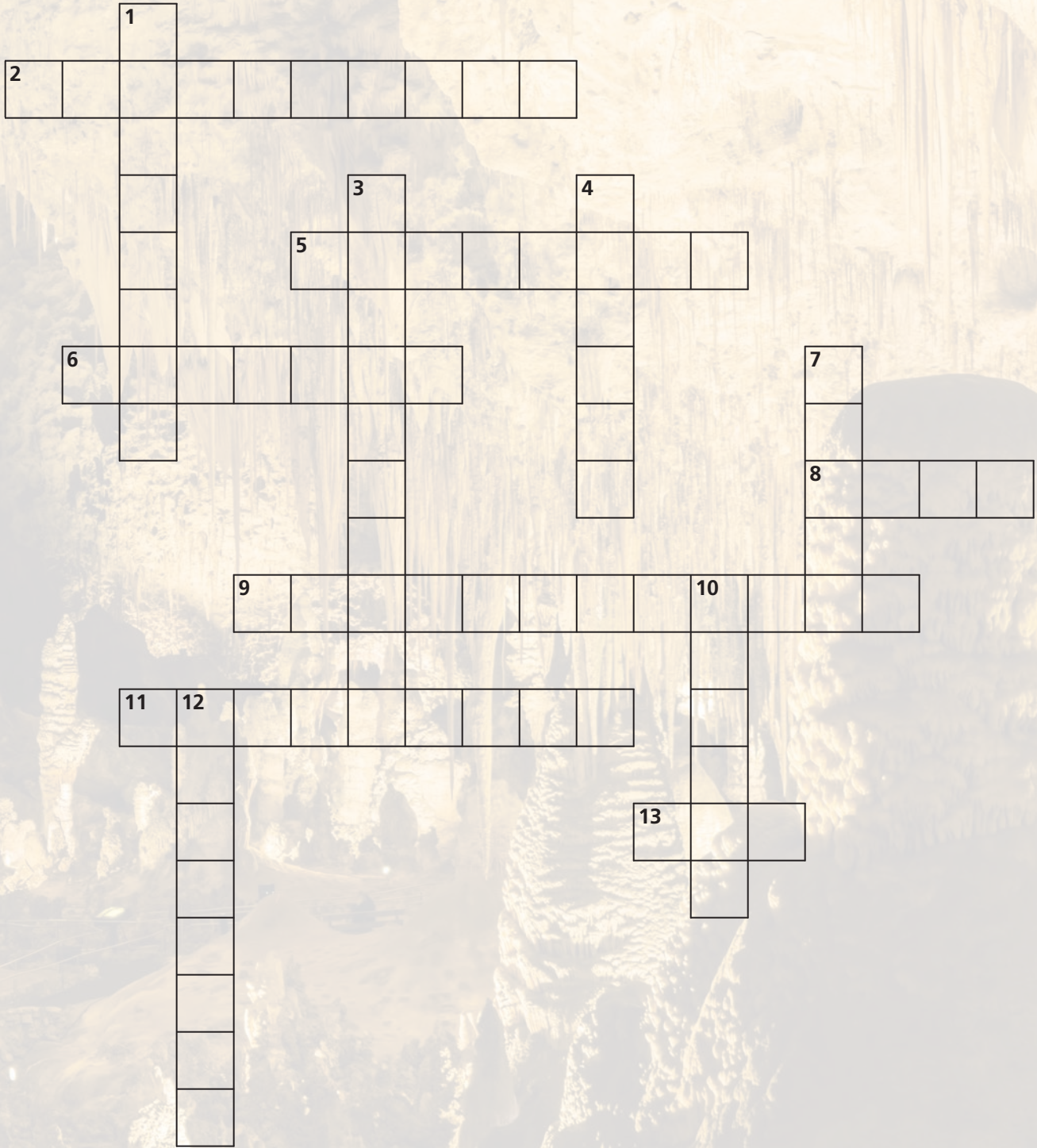
- Carlsbad Caverns National Park is located in the _____ Desert.
- These representatives of United States citizens made Carlsbad Caverns a national park in 1930.
- Cave formations are often made up of this type of mineral.
- A type of environment that receives very little precipitation (rain and snow).
- Carlsbad Caverns and other national parks are protected and set aside for the _____ of resources.
- Like many caves, Carlsbad Cavern formed in this kind of rock.
- Fossils of ocean creatures, like trilobites, are found in the park. This indicates that millions of years ago, this area was covered by an inland _____.

WORD BANK

Chihuahuan
Invasive
Sea
Calcite
Limestone
Milky Way
Helmet
Preservation
Tailed
Arid
Bottomless
Guano
Congress

DOWN

- Visible on a dark and clear night at the park, this is a dusty white band of stars that stretches across the sky.
- Found in the Big Room, the _____ Pit is actually 140 feet (43 meters) deep and a favorite for many visitors.
- A caver wears this on their head for safety when exploring wild caves.
- Another word for bat droppings which were once mined from Carlsbad Cavern to be used as fertilizer.
- From April through October, Carlsbad Cavern is home to thousands of migratory bats. These bats are called Brazilian free-_____ bats.
- These species from a different place are introduced and ultimately harm native habitats.



Cavern Word Search

Complete the word search by finding the underlined words in the puzzle.



Roadrunner



Western Diamondback



Cave Spider

S	T	E	K	C	I	R	C	P	Q	S	S	M
A	S	R	N	S	A	I	T	R	D	W	R	I
L	E	T	O	Y	O	C	A	F	A	O	E	C
N	R	E	B	G	A	M	U	L	W	E	D	R
S	E	U	T	B	L	N	L	R	I	U	I	O
W	N	I	L	A	Y	O	I	T	B	S	P	B
E	N	A	D	T	W	A	B	L	E	U	S	E
L	U	A	K	S	H	G	S	I	E	C	E	S
A	R	G	Y	E	N	W	I	N	T	V	V	R
H	D	I	S	X	S	C	H	V	L	E	A	F
T	A	R	A	N	T	U	L	A	E	K	C	J
I	O	T	D	P	E	J	S	T	S	M	A	L
H	R	I	N	G	T	A	I	L	C	F	T	E



Tarantula



Cave Swallows



Cave Cricket

Carlsbad Caverns National Park has more wildlife than first meets the eye—both above and below ground! The Chihuahuan Desert is the most biologically diverse desert in the Western Hemisphere. There are many species of SNAKES that hide beneath rocks. As you drive into the park, you might be lucky enough to see a TARANTULA cross the road. It may look like a pig, but the JAVELINA is more closely related to the hippopotamus. Some animals are rare to see, but you can hear them calling into the night, like the COYOTE. It is not unusual to see a RINGTAIL hanging around the cavern, hoping to snag one of our Brazilian free-tailed BATS as they leave for dinner. These famous mammals are not to be confused with the cave SWALLOWS that make their mud nests in the cavern entrance. Keep your eyes open for New Mexico's state bird, the ROADRUNNER, too!

A TROGLOBITE is a creature that lives inside the cavern all year round, many are found in this cave. There are countless varieties of MICROBES that are helping scientific research—including finding life on other planets! You may not be able to spot the tiny CAVE SPIDERS on some of our active formations, but you may be lucky in seeing at least one of the three species of CRICKETS that live here. One of these species was even discovered here! There are several types of BEETLES that depend on other insects for survival. But perhaps the most bizarre cave creature is the HORSEHAIR WORM, a parasite that lives in cave pools.



Javelina

Winged Wonders

Carlsbad Caverns National Park is home to many species of bats. However, these amazing creatures are often misunderstood. Decide whether each statement below is true or false, then create your own story at the bottom of the page.

True / False Bats are flying mammals.

True / False Bats like to live in people's hair.

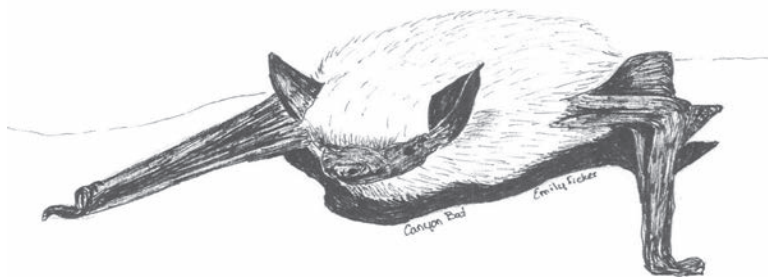
True / False Bats are helpful because some species eat a lot of insects.

True / False All bats have rabies.

True / False Like mice, bats are rodents.

True / False Bats are blind.

True / False All bats are vampires that eat blood.



Some ancient cultures wrote stories to explain how bats came to be today. Many tribes in southeast New Mexico believe that bats are messengers between the spirit world and the real world. If you throw your moccasin in the air and catch a bat, good luck is on the way!

Come up with your own personal legend about these magical animals. Try to use some of what you have seen and learned during your visit to Carlsbad Caverns National Park in your story.

A large, decorative green frame with a scalloped, wavy border. Inside the frame, there are seven horizontal lines for writing a story.

Carlsbad Caverns Diamante

Diamantes are a special kind of poem shaped like a diamond. They are seven lines long and have a special pattern. Choose something you learned about at the park during your visit. Create your poem below by picking words to describe the first word. Use the example below for inspiration.

Noun

Adjective

Adjective

Verb (-ing word)

Verb (-ing word)

Verb (-ing word)

Noun

Noun

Noun

Noun

Verb (-ing word)

Verb (-ing word)

Verb (-ing word)

Adjective

Adjective

Noun

Example

Cave
Dark Spooky
Challenging Frightning Inviting
Chambers Formations Squeezes Discoveries
Exploring Inspiring Protecting
Mysterious Beautiful
Cavern

What I Can Do!

The junior ranger motto is “Explore, Learn, and Protect.” Answer the questions below to explain how you can achieve these important goals.

1. One way I can explore my environment at home is by:

2. One place where I can go to learn more about plants and animals near my home is:

3. I can help protect plants, animals, and the environment near my home by:



NPS / DUSTIN BAKER ILLUSTRATION

Junior Ranger Pledge

I, _____, am proud to be a National Park Service Junior Ranger. I promise to explore, learn about, and protect my national parks and the natural world around me. I will share my knowledge of these special places with my friends and family.

Certificate of Achievement

_____ has successfully fulfilled the requirements of the Junior Ranger Program and is hereby proclaimed an official

Carlsbad Caverns National Park

Junior Ranger



Park Ranger

Date